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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,145	10/20/2003	Charles O. Nichol	NCO-01	2783
44728 7590 01/17/2007 J. BENNETT MULLINAX, LLC P. O. BOX 26029 GREENVILLE, SC 29616-1029			EXAMINER KARLS, SHAY LYNN	
			ART UNIT	PAPER NUMBER
			1744	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/17/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

5

Office Action Summary	Application No.	Applicant(s)	
	10/689,145	NICHOL, CHARLES O.	
	Examiner	Art Unit	
	Shay L. Karls	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 15-21, 23-28 and 36-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 15-21, 23-28 and 36-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/15/05, 7/5/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 8-14, 29-35, 40-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention (method), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/31/06.

The Examiner had included a second election in the restriction requirement, that was to be made if the applicant elected group I (apparatus). Since the applicant elected group I, an election should have been made to respond to the second election however, the applicant amended the claims in such a way that there is no need for a second election. Therefore, while the applicant traverses this election, the amendment to the claims nullifies the restriction.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 10-31 on pages 7 and 8 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 and 23-28 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the open lower end" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "said linkage" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "said linkage" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "said linkage" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 recites the limitation "the toggle joint" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the rotatable operator" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the linkage" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 28 recites the limitation "the rotatable operator" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 1744

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 15-21, 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Dupre (USPN 4574420).

Dupre teaches a portable vacuum cleaner comprising an upright frame (14, 16) and an upright hopper (12) with a closure cover for closing the hopper (figure 4 shows that the hopper has a top portion which acts as the cover). There is a mechanical apparatus (92) evacuating air from the hopper creating a vacuum in the hopper. There is a discharge chute (74) carried adjacent a lower end of the hopper. The chute has a downwardly inclined surface extending at least partially across a lower end of the hopper forming a downwardly extending passageway of diminishing cross section (figure 4). There is an outlet opening in the passageway (figure 2 shows the chute with the gate 80 open exposing the outlet). There is a pivoted gate (80) in a normally closed position containing material collected in the hopper.

With regards to claim 2, there is a hose carried collection apparatus (132, 136) communicating with the hopper.

With regards to claim 3, there are wheels (20) carried by the frame for transporting the cleaner.

Art Unit: 1744

With regards to claim 4, there is at least one receptacle (30) carried by the frame (16) for receiving a lift truck operator. The person driving the cleaner could be considered a lift truck operator.

With regards to claim 5, there is a linkage (78 and arms connected to portion of 78), which includes a manually actuated operator for moving the gate to open and closed positions. The user operating the cleaner manually actuates the hydraulic door cylinder (78) when the gate is to be opened.

With regards to claim 6, the linkage includes a toggle linkage (figure 2, not labeled but is what connects 78 to 80).

With regards to claim 7, the hopper is fixed to the frame and the linkage is located on the hopper (figure 4, shows the hopper connected to the frame and the linkage located the hopper).

With regards to claim 15, Dupre teaches a cleaner comprising an upright frame (14, 16), an upper hopper (12) carried within the frame. There is a closure at a top of the hopper creating a partial vacuum in the hopper for collecting material within the hopper (figure 4 shows that the hopper has a top portion which acts as the cover). There is a normally closed discharge apparatus (74) carried adjacent a lower end of the hopper for retaining material collected in the hopper. There is an operator (78 and arms connected to portion of 78) positioned adjacent to and externally of the hopper for discharging the material from the hopper.

With regards to claim 16, there is a hose carried collection apparatus (132, 136) communicating with the hopper.

With regards to claim 17, there are wheels (20) carried by the frame for transporting the cleaner.

Art Unit: 1744

With regards to claim 18, there is at least one receptacle (30) carried by the frame (16) for receiving a lift truck operator. The person driving the cleaner could be considered a lift truck operator.

With regards to claim 19, the operator includes a toggle linkage (figure 2, not labeled but is what connects 78 to 80).

With regards to claim 20, the upright hopper has a fixed mounting in the frame and the normally closed discharge apparatus is carried by the hopper (figure 4, shows the hopper connected to the frame and the linkage located the hopper).

With regards to claim 21, the normally closed discharge apparatus includes a discharge chute (figure 4, bottom slanted portion of 74) and a normally closed gate (80) for discharging material from the hopper.

With regards to claim 23, there is a linkage (78 and arms located between 78 and 80 in figure 2) external to the hopper and in which the discharge chute forcefully biases the gate toward a closed position (figure 1).

With regards to claim 24, the linkage includes a toggle joint exerting the forceful biasing of the gate (arms between 78 and 80 in figure 2).

With regards to claim 25, the gate is carried by a manually rotatably operator having a connection to the gate through a toggle joint. The toggle joint is activated manually by a user so that the hydraulic door cylinder opens the gate). The rotatable operator is the bent arm in figure 2 that is attached to the gate at one end and to the hydraulic cylinder at the other end.

With regards to claim 26, there is further a gasket (102) between the gate and the chute for facilitating retention of liquid and solid material in the hopper.

Art Unit: 1744

With regards to claim 27, the rotatable operator extends at right angles to the linkage (at some point during the opening of the gate, the linkages will be at right angles to the operator since operator passes through a plurality of angles when opening the gate).

With regards to claim 28, there gate includes pivotal mounting (figure 2, point at which gate is attached to hopper) which is parallel to the linkage. Since the pivot mounting is a point, a line could be drawn through the point so that it is parallel with the operator.

Claims 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Engel et al. (USPN 6966097).

Engel teaches a cleaner comprising an upright frame (13), an upper hopper (14) carried within the frame. There is a closure at a top of the hopper creating a partial vacuum in the hopper for collecting material within the hopper (27, 28). There is a normally closed discharge apparatus (46) carried adjacent a lower end of the hopper for retaining material collected in the hopper. There is an operator (136) positioned adjacent to and externally of the hopper for discharging the material from the hopper.

With regards to claim 16, there is a hose carried collection apparatus (56) communicating with the hopper.

With regards to claim 17, there are wheels (figure 1, not labeled) carried by the frame for transporting the cleaner.

With regards to claim 18, there is at least one receptacle (12) carried by the frame for receiving a lift truck operator. The person driving the cleaner could be considered a lift truck operator.

With regards to claim 19, the operator includes a toggle linkage (136).

With regards to claim 20, the upright hopper has a fixed mounting in the frame and the normally closed discharge apparatus is carried by the hopper (figure 8 shows the hopper connected to the frame and figure the linkage located the hopper).

With regards to claim 21, the normally closed discharge apparatus includes a discharge chute (portion of hopper in which the debris flows out of) and a normally closed gate (46) for discharging material from the hopper.

Claims 36 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson (USPN 4509963).

Jackson teaches a vacuum cleaner comprising an exterior frame including a base (24). There is a hopper (22) mounted on the frame. There is a fan (28) mounted at a top of the hopper inducing a partial vacuum therein. There are transversely spaced receptacles (30) within the base for receiving the forks of a fork life truck (figure 4).

With regards to claim 37, there are wheels (not labeled, figure 4) for transporting the vacuum independently of the receptacles.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1744

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson (USPN 4509963) in view of Dupre ('420).

Jackson teaches all the essential elements of the claimed invention however fails to teach that the hopper includes a downward chute at the bottom of the hopper for discharging waste collected in the hopper (claim 38). Jackson also fails to teach a pivoted gate and linkage for opening the gate for discharging the material (claim 39). It is well known in the art to use hoppers with discharge chutes and pivoted gates. For example, Dupre teaches a hopper (14) with a discharge chute (74) that comprises a pivoted gate (80) with a manually actuated linkage (78 and arms between 78 and 80 in figure 1) for opening the gate for the discharging waste material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hopper of Jackson with a discharge chute comprising a pivoted gate on the bottom of the hopper as it is considered well known and further exemplified by Dupre as a means for emptying the hopper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

Art Unit: 1744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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